

368A ABSTRACTS - Myocardial Ischemia and Infarction

JACC March 19, 2003

the TIMI score and 0.87 for the TIMI-NBNP score. Conclusion: Although the cohort of patients is relative small, we could demonstrate the importance of additional measurement of NBNP levels for risk stratification in patients with UA/NSTEMI.

1126-105 Serum Creatinine, Creatinine Clearance, and Long-Term Mortality After Non-ST Elevation Acute Coronary Syndrome Treated Very Early and Predominantly With Percutaneous Coronary Intervention

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Background: Very early revascularization is the most contemporary management strategy in non-ST-elevation acute coronary syndromes (NSTACS). Predictors of outcome with this strategy are poorly defined. We sought to quantify the impact of baseline renal dysfunction on short and long-term mortality in patients with NSTACS treated with an very early invasive strategy. **Methods:** We conducted a prospective cohort study in 1400 consecutive patients with NSTACS undergoing coronary angiography and subsequent coronary stenting of the culprit lesion as the primary revascularization strategy within 24 hours of admission. Mortality in-hospital and at 3 years was stratified according to quartiles of serum creatinine and corrected creatinine clearance determined on admission. **Results:** Kaplan-Meier survival analysis demonstrated a cumulative 3-year survival of 95.3% in the first (<0.71 mg/dL), 95.1% in the second (0.71-0.84 mg/dL), 92.9% in the third (0.84-1.00 mg/dL), and 83.1% in the fourth quartile of serum creatinine (≥ 1.00 mg/dL) ($p<0.001$). For the quartiles of creatinine clearance (<68, 68-85, 85-105, ≥ 105 mL/min), cumulative 3-year survival was 82.0%, 91.3%, 95.7% and 96.9%, respectively ($p<0.001$). Patients in the highest quartile (≥ 1.00 mg/dL) of serum creatinine were six times more likely to die in-hospital (hazard ratio 6.1, [95% CI 2.6 to 14.1]; $p<0.001$) and almost four times more likely to die during long-term follow-up (hazard ratio, 3.8 [CI 2.4 to 5.8]; $p<0.001$). By multivariate Cox regression analysis, serum creatinine in the highest quartile remained a strong independent predictor of mortality. **Conclusion:** Baseline renal dysfunction is a strong independent predictor of in-hospital and long-term mortality after NSTACS treated with very early revascularization.

	<3 hrs (n=559)	3-6 hrs (n=930)	>6hrs (n=513)	p Value
TIMI 3 Flow Post-PCI	96.1%	95.3%	96.0%	NS
Mortality (30 day)	0.9%	2.3%	2.2%	0.04*
Mortality (1 year)	2.5%	4.5%	4.8%	0.04*
Re-infarction (1 year)	1.4%	2.6%	3.3%	0.08*
Stroke (1 year)	0.5%	0.3%	0.8%	NS

*<3hrs vs >=3hrs

4:15 p.m.

827-2

Baseline Features and Clinical Results in Patients Excluded From Randomization From a Large International Trial of Reperfusion Strategies in Acute Myocardial Infarction: The CADILLAC Registry

Mark A. Turco, David A. Cox, Eulogio Garcia, James E. Tchong, John J. Griffin, Giulio Guagliumi, Thomas D. Stuckey, John D. Carroll, Cindy L. Grines, Barry D. Rutherford, Steve Slack, Martin Fahy, Roxana Mehran, Alexandra J. Lansky, Gregg W. Stone, Center for Cardiac & Vascular Research and Washington Adventist Hospital, Takoma Park, MD, Cardiovascular Research Foundation and Lenox Hill Heart and Vascular Center, New York, NY

Background: The randomized CADILLAC trial was performed to compare PTCA versus stenting with or without abciximab, in AMI patients of any age without cardiogenic shock presenting <12hrs from symptom onset. Patients meeting these criteria but who were excluded from randomization for a variety of pre-specified angiographic reasons were followed in an in-hospital registry.

Results: Of 2,681 AMI pts consented, 599 (22%) were not randomized, most commonly because of extensive LM/3-vessel disease (38%), vessel size <2.5mm or >3.75mm (23%), excessive tortuosity (17%), calcification (16%), unprotected LM or ostial disease (16%), or non-identifiable culprit (15%). Compared to randomized pts, those in the registry were more likely to be older (69 vs 52 yrs, $p=0.002$), have prior MI (20% vs 14%, $p=0.0001$), prior CABG (12% vs 2%, $p<0.0001$), 3-vessel disease (52% vs 15%, $p<0.0001$), lower LVEF (45% vs 50%, $p=0.0001$), and fewer inferior infarcts (47% vs 58%, $p<0.001$). Pts in the registry were treated either medically (38%), by PCI (39%) or with CABG (23%). Comparative outcomes are reported below.

In Hospital Outcome	Registry N=599	Randomized N=2082	P-Value
Final TIMI 3	80%	95%	<0.001
Death	4.0%	1.6%	0.001
Reinfarction	0.3%	0.2%	NS
Revascularization	14.0%	2.5%	<0.001
Stroke	0.5%	0.5%	NS
MACE	18.0%	4.6%	<0.001

Conclusions: Although 78% of consented pts (and 90% of those undergoing PCI) were randomized in CADILLAC, pts with AMI excluded from randomization on angiographic grounds comprised an extremely high risk cohort with multiple adverse baseline features, lower procedural success, and diminished event-free survival. These data partly explain differences between AMI trials that randomize pts before versus after angiography.

4:30 p.m.

ORAL CONTRIBUTIONS

827 Contemporary Issues in Primary Angioplasty on Acute Myocardial Infarction

Monday, March 31, 2003, 4:00 p.m.-5:30 p.m.
McCormick Place, Vista S406 A

4:00 p.m.

827-1

How Important Is Time to Treatment With Primary Percutaneous Coronary Intervention for Acute Myocardial Infarction? Results From the CADILLAC Trial

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Background: Time to treatment is critically important with thrombolytic therapy, but may be less important with primary PCI.

Methods: The CADILLAC Trial enrolled pts with AMI <12 hrs without shock who were randomized to stenting vs PTCA +/- abciximab. Treatment time data were available in 2,002 pts.

Results: Median (25th and 75th percentiles) time from symptom onset to ER was 1.8 hrs (1.0, 3.4), from ER to balloon inflation (DB time) was 2.0 hrs (1.5, 2.7) and from symptom onset to balloon inflation (reperfusion time, RT) was 4.0 hrs (2.9, 6.1). RT (hrs) was longer at US sites (4.0 vs 3.7, $p=0.002$), in women (4.6 vs 3.8, $p<0.0001$), diabetics (4.6 vs 3.8, $p<0.0001$), and pts with CFX infarcts (4.4 vs 3.9, $p=0.0003$). Mortality (30 day and 1 yr) was lowest with RT < 3 hrs and there was a trend for lower 1 yr re-infarction with RT < 3 hrs (Table). After 3 hrs, further treatment delays had little impact on mortality. DB times (<1.5 vs 1.5-2.0 vs >2.0-3.0 vs >3.0 hrs) had little effect on 1 yr mortality (3.4% vs 4.3% vs 4.2% vs 4.8%, $p=NS$).

Conclusions: Early reperfusion (< 3 hrs) with primary PCI is associated with better 30 day and 1 yr survival and a trend toward less re-infarction at 1 yr. Delays beyond 3 hrs have little effect on survival. These data emphasize the importance of early reperfusion and have implications regarding pt triage and the mechanism of benefit of reperfusion therapy with primary PCI.

827-3

Relationship Between Time-to-Reperfusion and 30-Day Mortality in Patients With ST-Segment Elevation Myocardial Infarction Treated With Primary Angioplasty

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Background. Even if time-to-reperfusion has been demonstrated to be a main predictor of outcome in patients with ST-elevation myocardial infarction (STEMI) treated with thrombolysis, still controversial remains its prognostic role in patients treated with primary angioplasty.

Methods. A total of 1791 patients with STEMI treated with primary angioplasty at our Institution from 1994 to 2001, represent the population of the current study. All clinical, angiographic, and follow-up data were collected. According to time-to-reperfusion, patients were divided in 4 groups: Group 1 (< 2 hours), Group 2 (2-4 hours), Group 3 (4-6 hours), Group 4 (> 6 hours). A multivariate analysis was performed to identify independent predictors of 30-day mortality.

Results. At multivariate analysis, a time-to-reperfusion > 4 hours was an independent predictors of 30-day mortality.